

INTERNATIONAL SEARCH REPORT

International Application No

T/RU 03/00512

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B21D47/00 B32B3/28 E04C2/34

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B21D E04C B32B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

PAJ, EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 013, no. 174 (C-589), 25 April 1989 (1989-04-25) -& JP 01 004254 A (AICHI STEEL WORKS LTD), 9 January 1989 (1989-01-09) abstract; figures 4,5 ---	1
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 25, 12 April 2001 (2001-04-12) -& JP 2001 232431 A (NIPPON STEEL CORP), 28 August 2001 (2001-08-28) abstract; figures 1,2 ---	1
A	US 5 635 306 A (NIPPON STEEL CORPORATION) 3 June 1997 (1997-06-03) figure 4A --- -/--	1



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

16 September 2004

Date of mailing of the international search report

04/10/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Vinci, V

INTERNATIONAL SEARCH REPORT

national Application No

PCT/RU 03/00512

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>AT 389 070 B (GUERTH WERNER ING) 10 October 1989 (1989-10-10) figure 1</p> <p>-----</p>	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

JP/RO 03/00512

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 01004254	A	09-01-1989	NONE	
JP 2001232431	A	28-08-2001	NONE	
US 5635306	A	03-06-1997	JP 2891314 B2	17-05-1999
			JP 5269897 A	19-10-1993
			JP 2609028 B2	14-05-1997
			JP 5277597 A	26-10-1993
			JP 3069190 B2	24-07-2000
			JP 5269898 A	19-10-1993
			EP 0589054 A1	30-03-1994
			WO 9319933 A1	14-10-1993
			KR 9605425 B1	25-04-1996
AT 389070	B	10-10-1989	AT 198887 A	15-03-1989

BEST AVAILABLE COPY